EXHIBIT D – CLAIM 49 OF THE '059 Patent

49. A mobile device of a wireless communication system for handling component carrier activation and deactivation, the mobile device capable of receiving and transmitting on a plurality of component carriers, the mobile device comprising:

To the extent the preamble is limiting, Volkswagen's cars include telematics modules that practice this limitation. For example, the telematics modules and related communications technology in the car implement the following standards which practice the claimed invention:

[1] TS 36.321 3GPP TSG RAN; Evolved Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification (Release 10), v 10.1.0 (2011-03)

In particular, for example, the procedures set forth in TS 36.321 3GPP TSG RAN; Evolved Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification (Release 10), v 10.1.0 (2011-03), provide for handling component carrier activation and deactivation.

5 MAC procedures

means for starting a deactivation timer for a component carrier of the plurality of component carriers when the component carrier is activated, wherein the deactivation timer provides a period of time for component carrier activation:

This limitation is present in the Accused Products. For example, 3GPP standard TS 36.321 3GPP TSG RAN; Evolved Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification (Release 10), v 10.1.0 (2011-03) describes how the standard provides for starting a deactivation timer for a component carrier when the component carrier is activated where the deactivation timer provides a period time for component carrier activation:

TS 36.321 3GPP TSG RAN; Evolved Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification (Release 10), v 10.1.0 (2011-03)

5.13 Activation/Deactivation of SCells

If the UE is configured with one or more SCells, the network may activate and deactivate the configured SCells. The PCell is always activated. The network activates and deactivates the SCell(s) by sending the Activation/Deactivation MAC control element described in subclause 6.1.3.8. Furthermore, the UE maintains a sCellDeactivationTimer timer per configured SCell and deactivates the associated SCell upon its expiry. The same initial timer value applies to each instance of the *sCellDeactivationTimer* and it is configured by RRC. The configured SCells are initially deactivated upon addition and after a handover.

The UE shall for each TTI and for each configured SCell:

- if the UE receives an Activation/Deactivation MAC control element in this TTI activating the SCell, the UE shall in the TTI according to the timing defined in [2]:
 - activate the SCell; i.e. apply normal SCell operation including:
 - SRS transmissions on the SCell;
 - CQI/PMI/RI reporting for the SCell;

- PDCCH monitoring on the SCell;
- PDCCH monitoring for the SCell
- start or restart the *sCellDeactivationTimer* associated with the SCell;

. . .

- if the *sCellDeactivationTimer* associated with the activated SCell expires in this TTI:
 - deactivate the SCell;

...

means for extending activation time of the component carrier when a Physical Downlink Control Channel (PDCCH) indicating an uplink grant or downlink assignment for the component carrier is received; and

This limitation is present in the Accused Products. For example, 3GPP standard TS 36.321 3GPP TSG RAN; Evolved Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification (Release 10), v 10.1.0 (2011-03) describes how the standard provides for extending activation time of the component carrier when a Physical Downlink Control Channel (PDCCH) indicating an uplink grant or downlink assignment is received:

TS 36.321 3GPP TSG RAN; Evolved Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification (Release 10), v 10.1.0 (2011-03)

5.13 Activation/Deactivation of SCells

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The UE shall for each TTI and for each configured SCell:

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- if PDCCH on the activated SCell indicates an uplink grant or downlink assignment; or
- if PDCCH on the Serving Cell scheduling the activated SCell indicates an uplink grant or a downlink assignment for the activated SCell:
- restart the *sCellDeactivationTimer* associated with the SCell;

. . .

not extending activation time of the component carrier when no PDCCH indicating an uplink grant or downlink assignment is received. This limitation is present in the Accused Products. For example, 3GPP standard TS 36.321 3GPP TSG RAN; Evolved Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification (Release 10), v 10.1.0 (2011-03) describes how the standard provides for not extending activation time of the component carrier when no PDCCH indicating an uplink grant or downlink assignment is received:

TS 36.321 3GPP TSG RAN; Evolved Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification (Release 10), v 10.1.0 (2011-03)

5.13 Activation/Deactivation of SCells

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The UE shall for each TTI and for each configured SCell:

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- if the *sCellDeactivationTimer* associated with the activated SCell expires in this TTI:
 - deactivate the SCell;
 - stop the *sCellDeactivationTimer* associated with the SCell;
 - flush all HARQ buffers associated with the SCell.
- if PDCCH on the activated SCell indicates an uplink grant or downlink assignment; or
- if PDCCH on the Serving Cell scheduling the activated SCell indicates an uplink grant or a downlink assignment for the activated SCell:
 - restart the *sCellDeactivationTimer* associated with the SCell;
- if the SCell is deactivated:
 - not transmit SRS for the SCell;
 - not report CQI/PMI/RI for the SCell;
 - not transmit on UL-SCH for the SCell;
 - not monitor the PDCCH on the SCell;
 - not monitor the PDCCH for the SCell.